

PATENT

RECEIVED  
CENTRAL FAX CENTER

SEP 28 2006

## REMARKS

Claims 1-9 are pending in the present application. By this amendment, claims 1, 5, 8 and 9 are amended. The amendments do not introduce new matter and are fully supported by the specification. Support for the claim amendments may be found, for example, in paragraph [1037].

Claims 1, 5, 8 and 9 were rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement.

Applicants respectfully traverse this rejection.

Claim 1 has been amended to recite "determining a transmission rate of the channel quality value over the feedback channel based on the condition of the transmission channel." This is supported in the specification, for example, in paragraph [1037], which states that "[i]n one embodiment, the base station determines unfavorable reverse link channel conditions and transmits a control signal to the remote station, wherein the control signal informs the remote station as to whether the CQI channel should operate at a reduced rate or not." Thus, applicants respectfully request withdrawal of the rejection under 35 U.S.C. §112, first paragraph.

Claims 1, 5, 6, 8 and 9 were rejected under 35 U.S.C. §102(e) as being anticipated by U.S. Publication No. 2004/0013103 to Zhang et al.

Claims 2, 4 and 7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Zhang in view of U.S. Publication No. 2002/0150065 to Ponnekanti.

Applicants respectfully traverse the above rejections for the following reasons.

Claim 1 has been amended to recite:

"An apparatus for controlling the operation of a quality feedback channel in a wireless communication system, comprising:

a memory element; and

a processing element configured to execute a set of instructions stored on the memory element, the set of instructions for:

determining a channel quality value associated with a transmission channel;

determining a condition of the transmission channel;

## PATENT

if the transmission channel condition is favorable, then transmitting the channel quality value over one slot of the channel quality feedback channel;

if the channel condition is not favorable, then transmitting the channel quality value over a plurality of slots of the channel quality feedback channel; and

determining a transmission rate of the channel quality value over the feedback channel based on the condition of the transmission channel." (Emphasis added.)

Under 35 U.S.C. §102, anticipation requires that each and every element of the claimed invention must be disclosed in the prior art reference. However, Zhang does not disclose at least "determining a transmission rate of the channel quality value over the feedback channel based on the condition of the transmission channel" as recited in amended claim 1. In contrast, Zhang discloses a method of sharing communication channels among active users to save system resources. In his disclosure, Zhang explains that a user's buffer may be empty for a significant portion of the time that the user is active and Zhang believes that "it is not necessary to perform reverse link power control at the full rate..., and it is not necessary for an active user to send feedback information at the full rate." See, for example, Summary of the Invention paragraph 0011.

Zhang further explains in paragraph 0016 that "[his] method can include the step of switching between the first and second states [i.e., communicating between the first and second rates] of the terminal in dependence upon whether or not a data buffer for traffic communication with the terminal is empty." (Emphasis added.) In other words, the switching of the transmission rates of Zhang is based on whether a data buffer of a user is empty or not, and not based on the condition of the transmission channel as in the claimed invention.

As stated above, anticipation requires that each and every element of the claimed invention must be disclosed in the prior art reference; and since Zhang does not disclose at least "determining a transmission rate of the channel quality value over the feedback channel based on the condition of the transmission channel," Zhang cannot anticipate the claimed invention under 35 U.S.C. §102(e).

Applicants further submit that Ponnekanti also fails to disclose or suggest the above feature of amended claim 1 and was only cited as a secondary reference. Independent claims 5, 8 and 9 have also been amended to include similar features to claim 1, and claims 2-4, 6 and 7

RECEIVED  
CENTRAL FAX CENTER

PATENT

SEP 28 2006

depend from at least one of claims 1, 5 and 8 so they all should be allowable for the reasons stated above.

For at least the above reasons, applicants respectfully request withdrawal of the rejection of claims 1, 3, 5, 6, 8 and 9 under 35 U.S.C. §102(e) and the withdrawal of the rejection of claims 2, 4 and 7 under 35 U.S.C. §103(a).

### REQUEST FOR ALLOWANCE

In view of the foregoing, applicants submit that all of the pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

Dated: 09/28/2006

By: 

Kenneth K. Vu, Reg. No. 46,323  
(858) 658-5106

QUALCOMM Incorporated  
5775 Morehouse Drive  
San Diego, California 92121  
Telephone: (858) 651-4125  
Facsimile: (858) 658-2502